

Particle Counter Market worth \$980.85 million by 2030, growing at a CAGR of 9.88% - Exclusive Report by 360iResearch

The Global Particle Counter Market to grow from USD 461.25 million in 2022 to USD 980.85 million by 2030, at a CAGR of 9.88%.

PUNE, MAHARASHTRA, INDIA,
November 17, 2023 /
EINPresswire.com/ -- The "[Particle Counter Market](#) by Type (Airborne, Liquid), Module (Benchtop, Handheld, Portable), Technology, Application, End-User - Global Forecast 2023-2030" report has been added to 360iResearch.com's offering.

The Global Particle Counter Market to grow from USD 461.25 million in 2022 to USD 980.85 million by 2030, at a CAGR of 9.88%.



Request a Free Sample Report @ https://www.360iresearch.com/library/intelligence/particle-counter?utm_source=einpresswire&utm_medium=referral&utm_campaign=sample

A particle counter is a sophisticated instrument designed to measure the size and concentration of particulate matter suspended in a fluid medium, typically air or liquid. These devices are used across a range of industries for applications in cleanroom monitoring, air quality assessment, contamination control across manufacturing processes, filter testing and efficiency evaluation, and regulatory compliance. Stringent regulatory requirements for cleanrooms across various industries, comprising pharmaceuticals or medical device manufacturing, have accelerated the demand for particle counters. Increasing public awareness about indoor air quality issues has led to an increased demand for portable or handheld monitors. However, the complexity involved in setting up, calibrating, and maintaining the devices has impacted their adoption and development. Market players are working on improving the efficiency and operations of particle counters to address these issues. Integration of particle counters with building automation

systems enabling automated response mechanisms based on detected particulate levels, for adjusting HVAC settings or alerting maintenance staff about filter replacements needed, is the new advancement in the market.

Technology: Wide adoption of online particle counters to provide continuous real-time monitoring of air

Offline particle counters are portable devices that can be easily transported between locations for sampling air or liquid at various points within a given facility. These instruments are preferred when required to perform routine checks or spot measurements in areas prone to particle contamination. Besides, online particle counters are installed permanently within a facility's production line or cleanroom environment to provide continuous real-time monitoring of air or liquid particles. These systems enable rapid response to contamination events and offer complete process visibility on an ongoing basis.

Type: Increasing use of airborne particle counters in pharmaceutical manufacturing and semiconductor industries

Airborne particle counters are essential devices in various industries to monitor and control the concentration of particulate matter in the atmosphere. These counters are critical in cleanrooms, pharmaceutical manufacturing, semiconductor production, hospitals, and food processing facilities where air quality directly impacts product quality or human health. Commonly used airborne particle counters include optical particle counters (OPC) and condensation particle counters (CPC). On the other hand, liquid particle counters are employed in sectors that require stringent fluid cleanliness standards, in pharmaceuticals, biotechnology, the automotive industry, aerospace applications, petrochemicals, and water treatment plants. These instruments can detect particles suspended in liquids by measuring their size distribution or count through techniques namely light obscuration/absorption or light scattering.

Application: High penetration of particle counter in aerosol monitoring and research for ensuring safety standards

Aerosol monitoring and research applications involve measuring the concentration of particles in the air, which affect air quality, climate change, and human health. This application includes industrial plants or urban areas where increased particle emissions are common. Aerosol particles help to ensure safety standards, chemical contamination monitoring involves detecting hazardous substances in various media, comprising air, water, or soil. This is especially important when dealing with potentially harmful chemicals in pharmaceuticals or semiconductors industries. Particle counters play a critical role in cleanroom monitoring by ensuring compliance with strict cleanliness requirements within controlled environments such as semiconductor manufacturing facilities or pharmaceutical labs. Particle counters monitor contamination levels in liquids such as water or oil, ensuring quality control in food processing or automotive manufacturing industries. Monitoring drinking water quality is essential to ensure public health and safety, with particle counters detecting possible contaminants, including bacteria or hazardous chemicals. Indoor air quality monitoring helps maintain optimal air conditions within buildings by detecting allergens or pollutants.

End-User: Use of particle counter in the food & beverage sector to ensure product purity and prevent contamination risks

The particle counters are essential in the aerospace industry to ensure contamination control during manufacturing processes and equipment maintenance. Additionally, particle counters maintain high standards of safety and performance and accurate monitoring of particulates. In the automotive industry, particle counters monitor cleanroom environments during sensitive manufacturing processes such as engine assembly or electronics production. These devices stem from adherence to stringent quality standards that minimize defects caused by particle contaminants. Particle counters are utilized in the food & beverage sector to ensure product purity and prevent contamination risks associated with particles such as dust or bacteria. By monitoring air quality throughout production facilities, companies can uphold regulatory requirements and enhance customer confidence in their product's safety. The life sciences and medical device industries rely on particle counters to reduce contamination risks associated with research laboratories and manufacturing processes. Particle counters are vital in semiconductor manufacturing as they monitor cleanroom conditions to minimize particulate contamination during critical production processes. Accurate detection of contaminants is essential for avoiding defects that could lead to non-functioning chips or reduced performance.

Regional Insights:

The Americas region accounts for the significant use of particle counters owing to the strong presence of pharmaceutical companies and research institutions in North America working on maintaining compliance with stringent regulations. South American countries are experiencing rapid industrialization accompanied by growing concerns over environmental pollution, resulting in increased adoption of particle counters. Asia boasts both robust production capabilities and rapidly expanding markets for particle counters. China, India, and Japan are major countries in the global manufacturing landscape due to their low-cost labor force and strong government support for high-tech industries, including electronics manufacturing, where particle counters are widely used during production processes. Europe is another major market for particle counters, with countries including Germany and France at the forefront. The European Union has stringent regulations in place for industries such as pharmaceuticals and electronics to ensure high-quality standards, creating a favorable environment for adopting particle counting devices. Additionally, Europe has a strong focus on renewable energy projects, which often require air quality monitoring systems that utilize particle counters. Moreover, the region has numerous established companies working in the field of particle counting, aiding in research and development efforts as well as more localized production capabilities.

FPNV Positioning Matrix:

The FPNV Positioning Matrix is essential for assessing the Particle Counter Market. It provides a comprehensive evaluation of vendors by examining key metrics within Business Strategy and Product Satisfaction, allowing users to make informed decisions based on their specific needs. This advanced analysis then organizes these vendors into four distinct quadrants, which

represent varying levels of success: Forefront (F), Pathfinder (P), Niche (N), or Vital(V).

Market Share Analysis:

The Market Share Analysis offers an insightful look at the current state of vendors in the Particle Counter Market. By comparing vendor contributions to overall revenue, customer base, and other key metrics, we can give companies a greater understanding of their performance and what they are up against when competing for market share. The analysis also sheds light on just how competitive any given sector is about accumulation, fragmentation dominance, and amalgamation traits over the base year period studied.

Key Company Profiles:

The report delves into recent significant developments in the Particle Counter Market, highlighting leading vendors and their innovative profiles. These include Ace Instruments, Aroindia Electromech Pvt. Ltd., Beckman Coulter, Inc., Climet Instruments Company, Extech Instruments by Teledyne FLIR LLC, Ferrocure Machines Pvt. Ltd., Fluke Corporation, GrayWolf Sensing Solutions, LLC, Hal Technology, LLC, HiYi Techonology, HYDAC Digital GmbH, Kanomax Group, Lighthouse Worldwide Solutions Inc., Met One Instruments Inc., Mifa Systems Pvt. Ltd., National Analytical Corporation, Palas GmbH by Indutrade, PAMAS Partikelmess- und Analysesysteme GmbH, Particle Measuring Systems by Spectris PLC, Particles Plus, Inc., PCE Holding GmbH, Rion Co., Ltd., Setra Systems, Inc., Spectris PLC, SUTO iTEC Inc., and TSI Incorporated.

Inquire Before Buying @ https://www.360iresearch.com/library/intelligence/particle-counter?utm_source=einpresswire&utm_medium=referral&utm_campaign=inquire

Market Segmentation & Coverage:

This research report categorizes the Particle Counter Market in order to forecast the revenues and analyze trends in each of following sub-markets:

Based on Type, market is studied across Airborne and Liquid. The Liquid is projected to witness significant market share during forecast period.

Based on Module, market is studied across Benchtop, Handheld, and Portable. The Portable is projected to witness significant market share during forecast period.

Based on Technology, market is studied across Offline Particle Counters and Online Particle Counters. The Offline Particle Counters is projected to witness significant market share during forecast period.

Based on Application, market is studied across Aerosol Monitoring and Research, Chemical

Contamination Monitoring, Cleanroom Monitoring, Contamination Monitoring of Liquids, Drinking-Water Contamination Monitoring, and Indoor Air Quality Monitoring. The Drinking-Water Contamination Monitoring is projected to witness significant market share during forecast period.

Based on End-User, market is studied across Aerospace, Automotive, Food & Beverage, Life Sciences & Medical Device, and Semiconductor. The Life Sciences & Medical Device is projected to witness significant market share during forecast period.

Based on Region, market is studied across Americas, Asia-Pacific, and Europe, Middle East & Africa. The Americas is further studied across Argentina, Brazil, Canada, Mexico, and United States. The United States is further studied across California, Florida, Illinois, New York, Ohio, Pennsylvania, and Texas. The Asia-Pacific is further studied across Australia, China, India, Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand, and Vietnam. The Europe, Middle East & Africa is further studied across Denmark, Egypt, Finland, France, Germany, Israel, Italy, Netherlands, Nigeria, Norway, Poland, Qatar, Russia, Saudi Arabia, South Africa, Spain, Sweden, Switzerland, Turkey, United Arab Emirates, and United Kingdom. The Europe, Middle East & Africa commanded largest market share of 40.21% in 2022, followed by Americas.

Key Topics Covered:

1. Preface
2. Research Methodology
3. Executive Summary
4. Market Overview
5. Market Insights
6. Particle Counter Market, by Type
7. Particle Counter Market, by Module
8. Particle Counter Market, by Technology
9. Particle Counter Market, by Application
10. Particle Counter Market, by End-User
11. Americas Particle Counter Market
12. Asia-Pacific Particle Counter Market
13. Europe, Middle East & Africa Particle Counter Market
14. Competitive Landscape
15. Competitive Portfolio
16. Appendix

The report provides insights on the following pointers:

1. Market Penetration: Provides comprehensive information on the market offered by the key players
2. Market Development: Provides in-depth information about lucrative emerging markets and

analyzes penetration across mature segments of the markets

3. Market Diversification: Provides detailed information about new product launches, untapped geographies, recent developments, and investments

4. Competitive Assessment & Intelligence: Provides an exhaustive assessment of market shares, strategies, products, certification, regulatory approvals, patent landscape, and manufacturing capabilities of the leading players

5. Product Development & Innovation: Provides intelligent insights on future technologies, R&D activities, and breakthrough product developments

The report answers questions such as:

1. What is the market size and forecast of the Particle Counter Market?

2. Which are the products/segments/applications/areas to invest in over the forecast period in the Particle Counter Market?

3. What is the competitive strategic window for opportunities in the Particle Counter Market?

4. What are the technology trends and regulatory frameworks in the Particle Counter Market?

5. What is the market share of the leading vendors in the Particle Counter Market?

6. What modes and strategic moves are considered suitable for entering the Particle Counter Market?

Read More @ https://www.360iresearch.com/library/intelligence/particle-counter?utm_source=einpresswire&utm_medium=referral&utm_campaign=analyst

Mr. Ketan Rohom

360iResearch

+1 530-264-8485

ketan@360iresearch.com

This press release can be viewed online at: <https://www.einpresswire.com/article/669113280>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2023 Newsmatics Inc. All Right Reserved.